

• • R E M A R K S • •

The Official Action of April 9, 2003 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, claim 1 has been changed to correct the informality noted by the Examiner on page 2 of the Official Action.

Inasmuch as the change made herein for claim 1 was suggested by the Examiner and addresses and overcomes an informality, entry of this change to the claims is believed to be appropriate after Final Rejection.

Accordingly, entry of the change to claim 1 is respectfully requested.

Claims 1-4 are pending in this application.

Claims 1-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,957,908 to Kline et al.

For the reasons set forth below, it is submitted that each of the pending claims are patentable over Kline et al. and therefore, the outstanding rejection of the claims over Kline et al. should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Kline et al. as disclosing:

...a disposable diaper (20), a topsheet (24), backsheet (26), core (28), front waist region (46), rear waist region (44), crotch region (48), wings (62, 64) from on the rear portion and extending outward (See Figures 1-7). Kline discloses mechanical fasteners (30) located on inner surfaces of the wings (See Figure 7). Kline also

discloses the wings being made of thermoplastic fibers (column 15, lines 29-67) and having fine fusions spots (250), where there is a greater density of fusion spots on the outward region, than in the inward region (See Figure 7). Kline discloses the wings being made of a laminate of two layers, where the layers are bonded at spots 250, using methods such as heat, pressure or ultrasound (column 16, lines 28-30).

The Examiner states that:

It is the Examiner's position that it is impossible to laminate two sheets together, using a heating method, pressure method or ultrasound method from non-exposed surface, or from inside.

Therefore, the Examiner takes the position that "it is inherent in the method itself that when laminating two pieces of materials using heat, pressure or ultrasound means, then the spots must be formed on the outside surface of at least one of the layers."

The Examiner has not relied upon a prior art teaching that establishes on the record that laminating two pieces of materials using heat, pressure or ultrasound means always forms fusion spots that extend to the outer surface of the pieces of material. Absent reliance upon and citation of such a teaching, the rejection appears to be based upon an unsupported allegation.

Such a rejection is therefore improper and prejudicial to applicants, because they are not in a position to rebut the Examiner's unsupported conclusion of inherency.

Applicants note that Kline et al. teaches that the ear panels can be made from a number of materials. Note at column 15, lines 57-61 Kline et al. teach that:

Other suitable materials for use as or in the ear panels include structural elastic-like film (SELF) webs, as described above, natural rubber, natural rubber foams, elastomeric scrims, woven or nonwoven elastomeric webs, elastomeric composites such as elastomeric nonwoven laminates, zero strain stretch laminates, prestrained stretch laminates or the like.

It seems that Kline et al. provides for materials that would not necessarily melt, while other materials which are used to form the laminate may possibly melt. This would explain Fig. 7 of Kline et al.

That is, perhaps in Fig. 7 the material layer underlying backsheet 26 melts while backsheet 26 does not. In such a configuration, fusion spots would not extend through the upper surface of backsheet 26 in Fig. 7. Of course, it could be that in the embodiment depicted in Fig. 7 the spots 250 are merely adhesive spots.

It is nevertheless urged that, depending on the materials used to form the layers used in a laminate, any fusion spots formed by heating, pressure and/or ultrasound would be limited to those layers which melt at the processing temperatures/pressures. Some layers might not melt, but could nevertheless be bonded to an adjacent, melted layer.

What is irrefutably clear is that in Fig. 7, Kline et al. does not teach that the upper surface of ear panel 64 has fusion spots formed therein, even though Kline et al. does illustrate the spots 250 between the layers of materials from which the ear panels are formed. (which may actually be adhesive spots).

It is further noted that in addition to not specifically teaching fusion spots that extend through the surface of the ear panels, Kline et al. teaches embodiments that clearly do not include fusion spots that extend through the ear panels.

This means that Kline et al. teaches no particular reason or purpose or benefit for having fusion spots that extend through the ear panels.

It is important to recognize that Kline et al. is concerned with increasing the anchoring strength of the fastening elements.

Note, at column 16, lines 34-47 Kline et al. teaches:

Preferably, the differential bonding creates high bond zones 252 near or at the distal and proximal edges 66 and 68 of the ear panels to prevent creep and provide strength in those zones. (As used herein, the term "high bond zones" refers to those areas of the laminate comprising a relatively high frequency of individual bonds, a relatively greater bonded area or bonds that are relatively stronger than bonds in other areas of the laminate.) The high bond zones, including distal high bond zone 253 and proximal high bond zone 251 (as shown in FIG. 7), may be completely bonded or may comprise a relatively high frequency of bonds or large area of bonding. The high bond zones resist creeping and provide a stronger foundation for any fastening elements that may be joined thereto.

As the Examiner can appreciate, there is no reason to have the bonding sites of Kline et al. extend through the upper surface of the ear panels.

In contrast to Kline et al., applicants' invention provides fine fusion spots on the inner surfaces of the wings in order to secure the male mechanical fastening members in peelable engagement with the upper surface of the wings.

As discussed in the paragraph bridging pages 6 and 7 or applicants' specification:

These male members 22 are peelably engaged with respective fastener holding zones (out side regions) 41 as the fastener sections 21 are folded back onto the inner surface if the diaper (See Fig. 1).

The fine fusion spots secure portions of the fibers which form the wings and thereby provide engageable structure which cooperates with the male members 22.

Note, there are more fine fusion spots in fastener holding zones 41 in Fig. 3.

Kline et al. either teaching applicants' claimed fine fusion spots nor the function provided thereby.

Accordingly, it is submitted that applicants' invention defines over Kline et al. both structurally and functionally.

Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon Kline et al. as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as Kline et al. does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is not novel and neither anticipated nor obvious over the teachings of Kline et al. and the outstanding rejection of the claims should hence be withdrawn.

Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.


It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of

time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,


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Marked-Up Copy of the Claims
As Amended on June 23, 2003

1. (Three Times Amended) A disposable diaper comprising:

- a liquid-pervious topsheet;
- a liquid-impervious backsheet;
- a liquid-absorbent core disposed between said liquid-pervious topsheet and said liquid-impervious backsheet;
- a front waist region;
- a rear waist region;
- a crotch region extending between said front waist region and said rear waist region in a longitudinal direction of the diaper;
- wings formed on transversely opposite side portions of said rear waist region and extending outward in a circumferential direction intersecting said longitudinal direction, said wings having inner and outer surfaces and circumferentially outer side edges and circumferentially inner side regions; and
- fastener sections formed on said wings and extending outward in said circumferential direction said fastener sections having inner surfaces and male mechanical fasteners members formed on and extending from said inner surfaces,
- said wings comprising a nonwoven fabric made of thermoplastic synthetic fibers, said nonwoven fabric partially extends outward from circumferentially outer side regions of said wings to

form said fastener sections which are provided on the inner surfaces of the wings with said male mechanical fastener members,

[said wings being formed on the inner surfaces thereof with] a plurality of fine fusion spots formed on the inner surfaces of the wings, at which fine fusion spots said fibers are fused together, said plurality of fine fusion spots being arranged so that there is a greater number of said fine fusion spots per unit area in said outer side regions of said wings than in inner regions of said wings that extend inward from said outer side regions.